

Science, Religion and Africa in the New Millennium

Institution: Ogun State University Ago-Iwoye, The Department of Religious Studies

Instructor: Theresa T. Asojo Ph. D

Course Description:

This course will study the relationship between religion and science in an African milieu by examining the fundamental question of the relationship between faith and reason. Principles derived from the discussion of the relationship between faith and reason, will be used to discuss the Christian doctrine of Creation within a world view influenced by Darwin's theory of evolution, and within a world view influenced by African myths of the origin of the universe. This is an attempt to integrate science and religion in the African setting.

This will be the first course integrating religion and science in this university and will therefore be a unique opportunity to study the two disciplines of science and religion objectively. The course will consist of 30 class session each session running an hour long, and be offered during the rain semester of the school year 2001/ 2002.

Central Course Objectives:

This course aims to introduce the relationship between science and religion with emphasis on issues of relevance in the modern era within the unique West African setting. Graduate philosophy, religion and theology students will be exposed to aspects of science such as evolution which they often-times ignore or discredit as being secular and contradicting to their faith. At the same time the need for constant dialogue will be emphasized so as to develop an historical and fact based understanding of views that are oftentimes considered dialectically opposed. Upon conclusion, the students should hold a cultural understanding of science and religion arising from dialogue and will be able to develop theories on how science can be related to religion, society and culture.

Other objectives for this course include:

- 1) To disabuse the students' mind of existing mistrust and fear between religion and science.
- 2) To help them develop critical and objective minds towards the study of science.
- 3) To emphasize the indispensable role of honesty, openness and integrity in the study of science and religion.
- 4) To appreciate the roles of religion and science in man's understanding of himself and the world he lives in.

5) To sow the seeds for ongoing dialogue between science and religion.

Invited Lecturers:

1. Anthony Alaba Akinwale, Ph.D

Discipline: Thomism and Systematic Theology

Dominican Institute of Philosophy and Theology

Ibadan, Nigeria

2. Kolawole Aiyedun, Ph.D

Discipline: Archaeology, Human Origin and Ethnoarchaeology

Department of Archaeology and Anthropology

University of Ibadan

Ibadan, Nigeria

3. Clement E. Basse, Ph.D

Discipline: Palaeobiology/Petroleum Geology

Department of Geology

University of Ibadan

Ibadan

4. S. Oluwale Ogundele, Ph.D

Discipline: Settlement Studies and Human Evolution

Department of Archaeology and Anthropology

University of Ibadan

Ibadan

This course (3 units, 15 weeks) is for advanced religion, theology and philosophy students. They will be exposed to serious science with a view to disabuse their minds of the mistrust that has hitherto existed

between science and religion due to the limited knowledge of the complimentary aspects of the disciplines. We aim to objectify the course through in depth study based on dialogue. There will be series of lectures and seminars on main topics.

There are five topics to be examined in the course.

- 1) Introduction to Science
- 2) Creation, cosmology and evolution
- 3) Faith and reason
- 4) The Science and Religion dialogue
- 5) Integration of science and religion in a modern era in Africa

Introduction to Science

Week 1:

Students will be introduced to the:

- 1) History and nature of Scientific idea and Scientific Thought
- 2) Methodology and Framework.

Guest lecturer: Kolawole Aiyedun, Ph.D

Readings:

Barbour, I. G. Issues in Science and Religion, Selected chapters.

-----, Religion and Science: Historical and contemporary issues, Selected chapters.

Brooke, John Hedley. Science and Religion: Some Historical Perspectives, Selected chapters.

Creation, Cosmology and Evolution

Week 2:

Examination of various African creation stories: Creation in African Traditional Religion

Readings:

Idowu, Bolaji. God in Yoruba Belief.

Awolalu & Dopamu, West African Traditional Religion

Mbiti, John S. Introduction to African Religion.

Week 3:

Examination of Judeo-Christian creation stories

Readings:

Gen. 1-3

John Scullion, Genesis xi-xiii; 9-49

Augustine's Confessions Bk. 9

Week 4:

Cosmology and the origins of the universe. Origins and the Development of Man

Topics to be examined include:

- 1) Classical Physics: both Pre-Newton and Post-Newton, examination of the physical and meta-physical. Is there still any room for God?
- 2) Modern cosmology the big-bang theory of creation and the physical evolution of the universe.
- 3) Other topics including the Galileo story, introduction to quantum theory and modern physics, introduction to creationism.

Guest lecturer: C. E. Basse, Ph.D

Readings:

Barbour, I. G. Physics and Metaphysics in the Seventeenth Century, ch. 1 in

Religion and Science Historical.

Davies, Paul. The Cosmic Blue Print.

Week 5:

Origin of the species:

- Origins and the Development of Man
- Relationships with the lower primates e.g. Lorises and Lemurs
- Relationships with Higher Primates e.g. Monkeys, Apes and Modern Man
- Environment (Charles Darwin - Natural selection)

Guest Lecturer: S. Oluwole Ogundele

Readings:

Pilbeam, D. The Ascent of Man: An Introduction to Human Evolution

Le Gros Clark, W. E. The fossil Evidence for Human Evolution: An Introduction to the Study of Palaeoanthropology.

Leakey, R. E. Human Origins

Harrison, G.A. et al. Human Biology: An Introduction to Human Evolution, Variation, Growth and Adaptability

Napier, J. The Root of Mankind

Week 6:

Origins of the species

Topics to be examined include:

- 1) Monogenism and Polygenism; Monogenism and polygenism are 18th Century ideologies that propose a single origin, one Adam and Eve or multiple origins in the case of polygenism.
- 2) Genetics and the human genome project

Guest lecturer: Anthony Alaba Akinwale, Ph.D

Reading:

Karl Rahner, Theological Reflections on Monogenism in Theological Investigations, vol. 1, pp.229-296.

Week 7:

Evolution

Examinations of the views of authors like Richard Dawkins, Michael Denton and Teilhard de Chardin on evolution. While Dawkins defends, deepens and clarifies Darwin's theory, and while Denton made a critique of the two, de Chardin explains the evolutionary biology of Darwin in terms of cosmology. Spencer on his part tries to marry scientific evolution to Biblical evolution.

Week 8:

First group of student seminars and essays or term papers due. The students who will examine creation and evolution will give their seminars this week.

Faith and Reason

Week 9:

Examination of the nature of belief

Christian philosophy and the concept of humanity, Descartes, Aquinas etc

Guest lecturer: Anthony Alaba Akinwale, Ph.D

Reading:

Aquinas, Summa contra, chs. 1-9.

Week 10:

Secular reason: Humanism, existentialism and atheism

Scientific basis of reason and intelligence

Guest lecturer: Anthony Alaba Akinwale, Ph.D

Week 11:

Class projects and dialogue: Overview of faith and reason, examination of traditional Yoruba or African attitudes towards faith and reason.

Group seminars. Second set of seminars this week.

Integration of science and religion in the modern era in Africa

Weeks 12 through 13:

We anticipate a series of seminars with guest speakers during these weeks, possible topics include:

1) Areas of conflict between science and Religion and their solution or the way forward (Faith based ethics, case study of death penalty, abortion and euthanasia)

M. I. Mozia, Ph.D

Lecturer in Moral Theology

SS. Peter & Paul Catholic Seminary

Bodija, Ibadan, Nigeria

2) Modern advances in science such as cloning and their effects on Faith

Prof. A. B. Ejiwunmi, MBBS, Dip. Hum. Bio., MSc

College of Health Sciences

Ogun State University

3) Moving beyond superstition, life after death in the face of AIDS and other diseases, and moving beyond the magic pill.

Prof. M.C. Asuzu, MB BS, FWCD, DOH, M.Sc, FMCPH

Department of Preventive and Social Medicine

University of Ibadan

Ibadan, Nigeria

4) Faith healing and the power of the mind.

Prof. E. A. Odumuyiwa, Ph.D

Department of Religious Studies

Ogun State University

5) Visualizing the Dynamic Relationship between Religion and Science.

Ayo Fadahunsi, Ph.D

Department of Philosophy

Ogun State University

Week 14:

Final set of student and group seminars final class essays and projects are due this week. Course summary and overview

Week 15:

Final Examination

Course methodology

Class sessions will incorporate several formats including lectures, both by the instructor and invited speakers, seminars and presentations by students, and small discussion groups. Personal interaction, creativity and participation are critical for the success of the course. In this respect, the class size would be limited to a maximum of 25 students.

Course Evaluation

- 1) Term papers 30%
- 2) Participation 10%
- 3) Group or individual seminars 20%
- 4) Quiz 10%
- 5) Final examination 30%

Required and Recommended Readings for the Course

Aquinas, St. Thomas. *Summa contra gentiles*, Bk, Chapters 1-9.

Augustine St. , *Confessions*, trans. by Henry Chadwick, Oxford University Press, 1991, Bk. IX.

Awolalu, J.O & Dopamu, P.A. *West African Traditional Religion*, Ibadan, Onibonoje Press, 1979.

Barbour, I.G. *Issues in Science and Religion*, 1966.

_____. *Religion and Science, Historical and Contemporary issues*, 1997.

Brooke, J. H. *Science and Religion*, Cambridge, 1991.

de Chardin, Teilhard. *The Phenomenon of Man*, New York: Harper, 1959.

Dawkins, Richard. *The Blind Watchmaker: Why the Evidence of Evolution reveals a Universe without design*, New York and London: W.W. Norton, 1987.

Denton, Michael. *Evolution: A Theory in Crisis*, Bethesda, MD: Adler and Adler, 1986.

Eiseley, L. *Darwin's Century*, Scientific Book Guild, 1959.

Harrison, G. A. et al., *Human Biology: An Introduction to Human Evolution, Variation, growth and adaptability*, Oxford, Oxford University Press, 1988.

Idowu, Bolaji. *God in Yoruba Belief*, London: Longmans, 1952.

Le Gros Clark, W. E. *The Fossil Evidence for Human Evolution: An Introduction to the study of Palaeoanthropology*, Chicago, University of Chicago Press, 1969.

Leakey, R. E. *Human Origins*, London, Macdonald and Janes, 1982.

Mbiti, John S. *Introduction to African Religion*, London, Heinemann, 1978.

Napier, J. *The Root of Mankind*, 1975.

Pilbeam, D. *The Ascent of Man: An Introduction to Human Evolution*, Canada, Macmillan Press, 1972.

Rahner, Karl. *Theological Reflection on Monogenism*, in *Theological Investigation Vol. 1*, London: Darton, Longman and Todd, 1974, pp. 229-276.

Scullion, John J. *Genesis: A Commentary for Students, Teachers and Preachers. Old Testament Studies V.6*, Collegeville, MN: Michael Glazier/The Liturgical Press, 1992, pp.9-49.